

26. (Amended) The recirculating filter tank system, wherein the tank includes an inlet pipe which extends from an interior to an exterior of the tank.

27. (Amended) The recirculating filter tank system, further comprising a sheet placed on one of the bottom and the sides of the tank.

28. (Amended) The recirculating filter tank system, wherein the sheet includes perforations so that effluent can flow from a filter to the integral troughs.

29. (Amended) The recirculating filter tank system, wherein the tank further includes a flange and ribs.

REMARKS

Claims 10-19 and 21-29 are pending in the application. By this amendment, claims 15 and 24-29 are amended. Claim 30 is canceled. Support for the amended claims is provided in Figures 3, 5-7 and at pages 6 and 7 of the specification. No new matter has been added. Reconsideration of the rejected claims is respectfully requested.

Applicant submits that entry of the Amendment is proper under 37 C.F.R. §1.116 since the Amendment: (a) places the application in better condition for allowance for the reasons discussed herein; (b) does not raise new issues requiring further search and/or consideration by the Examiner because these arguments were previously considered by the Examiner and thus further consideration and/or search by the Examiner is not warranted; (c) does not present any additional claims without canceling a corresponding number of finally rejected claims; (d) places the application in better form for an appeal, should an appeal be necessary; and (e) responds to formal matters set forth by the Examiner. The Amendment is necessary and was not earlier presented because it is made in response to arguments raised in the Final Rejection. Accordingly, entry of the Amendment is respectfully requested.

§ 112, 1st Paragraph Rejection

Claims 24-29 were rejected under 35 U.S.C. §112, 1st paragraph, for failing to include the use of a filtering system. The preamble of claim 24 is amended to recite

A recirculating filter tank system adapted for use in a septic system...

Claims 25-29 include similar amendments for consistency.

As now seen, claims 24-29 are more clearly directed to the tank, as originally contemplated (which can readily be seen from the claims as written). As such, the use of a filtering system is not required.

Additionally, claim 24 is a subcombination of the combination claim 10. That is, claim 10 clearly recites the use of a tank with troughs, in addition to the use of a filtering system. Claim 24 (and claims 25-29) is directed to the specific subcombination of the tank with the troughs. It is submitted that the relationship between the claimed subcombination constitutes the distinguishing features of the combination, as claimed. Thus, the combination as recited in claim 10 requires the particulars of the subcombination of claim 24. To use the subcombination as recited in claim 24, in its intended manner, a filter system needs to be used (but is not required by the claimed invention). According to MPEP §806.05(c), the requirements for restriction cannot be shown and the claims directed to the combination and subcombination should not be restricted. See also, MPEP §806.05(c), II. Continued examination is proper and the §112, 1st paragraph, rejection should be withdrawn.

Claim 15 was further rejected under §112, 1st paragraph, based on the recital of “polyvinyl”. Applicant amends claim 15 to delete the recital of “polyvinyl” and to now recite “polychloride”. The recital of polychloride finds support in the specification at page 6, line 11.

The §112, 1st paragraph rejection should now be withdrawn.

§ 112, 2nd Paragraph Rejection

Claims 24-29 were further rejected under 35 U.S.C. §112, 2nd paragraph. The Examiner indicated that these claims are incomplete because they do not include some type of filter. As

discussed above, claim 24 is amended to recite the specific use of a tank. The filter is not needed as the preamble is now amended.

Accordingly, the withdrawal of the rejection under 35 U.S.C. § 112, ¶ 2 is respectfully requested.

§ 102 Rejection

Claims 10, 11, 17, 21, 22, 24-28 and 30 have been rejected under 35 U.S.C. §102(b) as anticipated by U.S. Patent No. 5,997,747 to Jowett ("Jowett"). This rejection is respectfully traversed.

The invention of claims 10, 11, 17, 21, 22, 24-28 and 30 is directed to a self contained filtering (tank) system for a recirculating tank used in a septic system. The tank, itself, includes troughs on the side and bottom thereof. As previously discussed, the troughs are used for ventilation and drainage. This eliminates "ponding" of the effluent or water.

However, Jowett does not show troughs. In fact, the Examiner does not even appear to initially consider this feature of the claimed invention. For example, the Examiner, in toto, argued that Jowett discloses

A system comprising a tank formed from a synthetic material (col. 5, line 26), a plurality of "mattress-like" filter elements containing synthetic material (col. 7, line 36) within the tank, fluid passageways integrally formed in both the bottom and sides of the tank, and a "sheet" material (i.e., bag, see [] col. 3, line 34 and col. 4, lines 34-35) located in a side passageway, and an inlet pipe (i.e. 29) which extends from an interior to an exterior of the tank; and this is all that is required by claims 10, 11, 17, 21, 22, 24-28 and 30.

This is not what is "all that is required by claims 10, 11, 17, 21, 22, 24-28 and 30." In fact, independent claims 10 and 24 clearly recite the use of troughs integrally molded or formed in the side and bottom of the tank. In contrast, Jowett does not teach a tank having troughs on the side and bottom thereof. In fact, directing the Examiner's attention to Figures 1-3, the Jowett reference clearly shows a tank only with smooth walls and a smooth bottom. There are no troughs.

It is even submitted that the Jowett reference would not even consider the use of troughs in light of the fact that this reference clearly indicates that the tank is a "conventional" tank. See, col. 5, lines 12-15. In light of this fact, ponding and poor oxygen concentrations may result at the bottom of the Jowett tank.

The Examiner, in further considering Applicant's arguments, notes that Jowett does show troughs integrally formed in at least the bottom and sides thereof. Although this seems to be extraneous to the Examiner's initial argument, the Examiner does maintain that the Jowett system includes

both side passageways for fluid (i.e. 38 and unnumbered passageway containing material 43) and a bottom passageway for fluid (i.e. linking the two side passageways), and further shows (see, Fig. 2) that these passageways are integrally formed in the tank; and these fluid passageways are deemed to be structurally and patentably indistinguishable from the broadly recited "troughs" of claims 10 and 24.

Applicant simply does not agree with the Examiner. Reference numeral 38 is simply a passageway. It is not a trough as defined by the claimed invention. In fact, it is more accurately a compartment having a downward extending wall that allows passage of effluent to the bottom of the tank. On the other hand, a trough is a "shallow channel or depression" as defined by Merriam Webster's Collegiate Dictionary, 10th edition. Certainly, the passage 38 of Jowett does not fit within this definition, nor was it intended to fit within this definition, especially in view of the fact that the Jowett tank is a conventional tank. Jowett further mentions the use of a compartment or chamber 40, but this, again, is not a trough as defined by the present invention. Further, Applicant does not even see a bottom passageway, as argued by the Examiner. Applicant merely sees a flat bottom surface, which surely cannot be considered a trough.

Also Jowett does not show a mattress-like filter with aggregate material sealed therein. Instead, Jowett primarily teaches the use of foam or sponge blocks with iron oxide (Jowett at col.5, lines 34-35.) In Figure 5, the iron oxide is provided within a bag disposed between blocks. (Jowett at col.7, lines 33-36.) The iron oxide particles precipitate iron phosphate. (Jowett at col.5, lines 54-64.) In contrast, the present invention uses aggregate material for a biological process; that is, the aggregate material allows bacteria to thrive thereon and thus allow for

filtration via a biological process. This is not accomplished via the iron oxide of the Jowett reference, which is merely a chemical process.

As to some other features of the claimed invention, the Examiner argued that the bag (col. 3, line 34) is equivalent to the “sheet” of claims 21 and 27. This is respectfully noted as incorrect. The bags are for holding iron oxide. On the other hand, the sheets (made of plastic or PVC or other suitable material) are a “broad surface¹” covering the troughs to prevent the filters from clogging or obstructing the troughs. This ensures that there is proper drainage through the system of the present invention. This is quite different from bags (which are the filters themselves) of Jowett that contain iron oxide for use in a chemical process. It would be these bags with which the sheets of the present invention are used (if this was the same type of system; although, Applicant argues that this is not the same type of system and the sheets would not even be required or contemplated by the Jowett system).

Claim 28 recites the use of perforations in the sheet. This allows drainage from the filters into the bottom troughs of the tank. This feature is not shown in the Jowett reference. The bag, if they were interpreted to be sheets, which they cannot be, do not include perforations. If they did include perforations, the bags would be unable to contain the iron oxide therein.

Thus, in rejecting the claimed invention, the Examiner clearly has not met his burden under 35 U.S.C. §102, which requires that a single prior art reference must explicitly or inherently disclose each and every element of the claimed invention. MPEP § 2131 (citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987)). Applicant submits that the Jowett reference does not show all of the features of the claimed invention as argued above. Reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(b) is therefore respectfully requested.

§ 103 Rejections

Claims 23 and 29 have been rejected under 35 U.S.C. § 103 as obvious over Jowett. Claims 12-16, 18 and 19 were rejected under §103(a) over Jowett and Hirs. These rejections are respectfully traversed.

¹ Again referring to a definition in Merriam Webster's Collegiate Dictionary, 10th edition.

--7--

First, claims 23, 29 and claims 12-16, 18 and 19 are dependent claims. For this reason, these claims include the distinguishing features of the independently claimed invention. These claims should also be allowed.

Second, Jowett teaches foam blocks and bags filled with iron oxide. Jowett does not teach the use of aggregate materials much less the use of different sized aggregate materials in different mattress-like woven materials which encapsulate the different sized aggregate material. The use of the foam and other materials are provided for a chemical process, much different than the filtering process of the presently claimed invention. On the other hand, Hirs teaches several layers of manually disposed aggregate within a tank. (Compare Applicant's Specification at pp.1-2 with Hirs at Figure 3.) This structure is subject to all the disadvantages of the prior art, namely migration, compaction, and channeling. But, in any event, Applicant submits that there would be no motivation or suggestion in the applied references to make such a combination as suggested by the Examiner. This is simply based on the fact that the Jowett reference is directed to a chemical process, and Hirs is directed to a biological filtering process using aggregate material. Not to a chemical process. For this reason, one of ordinary skill in the art would not have been motivated to combine the references as submitted by the Examiner to achieve the claimed invention.

Thus, the rejections under 35 U.S.C. § 103 is moot and should be withdrawn.

CONCLUSION

In view of the foregoing amendments and remarks, Applicant submits that all of the claims are patentably distinct from the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue. The Examiner is invited to contact the undersigned at the telephone number listed below, if needed. Applicant hereby makes a written conditional petition for extension of time, if required.

Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's
Deposit Account No. 23-1951.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Andrew M. Calderon', with a stylized, cursive flourish at the end.

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APPENDIX

15. (Amended) The recirculating filter system of claim 14, wherein the synthetic particles are propylene or [polyvinyl chloride] polychloride.

24. (Amended) A recirculating filter tank system adapted for use in a septic system, comprising:
a tank having a bottom and sides; and
troughs integrally formed in at least the bottom and sides of the tank.

25. (Amended) The recirculating filter tank system, wherein the tank is made from one of precast concrete and a synthetic material.

26. (Amended) The recirculating filter tank system, wherein the tank includes an inlet pipe which extends from an interior to an exterior of the tank.

27. (Amended) The recirculating filter tank system, further comprising a sheet placed on one of the bottom and the sides of the tank.

28. (Amended) The recirculating filter tank system, wherein the sheet includes perforations so that effluent can flow from a filter to the integral troughs.

29. (Amended) The recirculating filter tank system, wherein the tank further includes a flange and ribs.